DOCUMENT RESUME

ED 408 520 CG 027 764

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TITLE An Assessment of HIV Issues among Inmates at a State Correctional Institution.
PUB DATE 97
NOTE 51p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Acquired Immune Deficiency Syndrome; Correctional Education; *Correctional Institutions; Educational Change; *Educational Needs; Educational Responsibility; *Fear; Prevention; *Prisoners; Racial Differences; Risk
IDENTIFIERS Peer Support

ABSTRACT

The rapid spread of the Acquired Immuno-Deficiency Syndrome (AIDS) throughout correctional facilities in the United States indicates that educational reforms are needed to combat this problem. But inmates' actual needs must be assessed before any program can be implemented. To assess this need, a historical overview of the problem, along with the results of a series of focus groups in which inmates responded to questions concerning their knowledge and experiences related to the Human Immuno-Deficiency Virus (HIV) and AIDS issues, are reported here. It was hypothesized that knowledge of the modes of transmission of HIV would differ among races. Furthermore, drug offenders were expected to engage in riskier behaviors than non-drug offenders. A survey of racial differences in previous studies is provided, along with a discussion of the special needs of prison populations. Existing peer education programs in prisons are also reviewed. Participants (N=51) were recruited for the focus groups. Results show that all inmates indicated that more education was needed. Inmates were particularly interested in educational programs which emphasized prevention. Inmates' responses indicate that most of them understood the basic mechanisms of HIV transmission; there was no significant difference in general HIV knowledge among racial or nature-of-offense groups. (Contains 35 references. (RJM)

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An Assessment of HIV Issues Among Inmates at a State Correctional Institution

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1997

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Abstract

The spread of AIDS throughout correctional facilities in the United States has been increasing at an alarming rate. Prison administration and AIDS activists are beginning to realize that the only way to combat this dilemma lies within educational reformation. Before an education program can be designed the actual needs of the inmates must first be assessed. With this in mind, a series of focus groups were conducted (race X nature of offense) in which the inmates themselves were asked questions concerning their beliefs, attitudes, knowledge, and experiences related to HIV and AIDS issues. It was hypothesized that knowledge of the modes of transmission of HIV would differ among races. Further, drug offenders were expected to engage in riskier behaviors than non-drug offenders. Results from the study showed no significant differences between racial or nature of offense categories.

Introduction

Acquired Immune Deficiency Syndrome (AIDS) is generally a frightening and terminal condition. Some refer to it as "the 20th century's most formidable biological foe" (Collins, 1996). Collins (1996) estimates that approximately 22 million people in the world are currently infected with the human immunodeficiency virus (HIV), which causes AIDS. According to the Centers for Disease Control and Prevention (1995), 295,473 (62%) of the 476,899 individuals who have been diagnosed with AIDS in the United State from January 1, 1980 through June 30, 1995 have died due to complications caused by this disease.

Racial differences in incidence rates emerge from analysis of data on the individuals who have died of AIDS. Information collected by the Philadelphia Department of Public Health (1995), showed that more black men and women have died of AIDS than those of any other race. From 1991 through 1995, black males experienced the fastest rise in the number of cases; however, hispanic men had the highest rates per 100,000 of all racial groups. In 1995, there was little difference between the incidence rates for blacks (.23% per 100,000) and hispanics (.24% per 100,000). The incident rate for white men was four times less than that of the other two groups (.05% per 100,000).

The Philadelphia Department of Public Health (1995) also discovered that the mode by which the virus was transmitted varied among the different races as well. The national percentage of AIDS cases in the general population that have been

attributed to male homosexual behavior has dropped from 54% in 1991 to 32% in 1995. However, 53% of all transmission among whites in 1995 was due to such behavior, thus making homosexual activity the leading risk factor for HIV transmission in white males. In 1995, the number of AIDS cases in by black and hispanic males attributed to engaging in homosexual activities was considerably less, 28% and 14% respectively.

While the percentage of AIDS cases is declining with respect to male homosexual activities, other risky behaviors, such as injection drug use and unprotected heterosexual behavior, has led to additional incidence of AIDS. The city of Philadelphia reported a 21% increase in the number of blacks infected from 1992 through 1995 (Philadelphia Department for Public Health, 1995). This rise in the number of cases is most notably due to the increased injection drug use, which soared 160% during the same time period. Also, there was a 178% increase from 1992 through 1995 in the incidence rate for hispanics due to heterosexual behavior.

The occurrence and spread of HIV and AIDS are not only causing difficulties for the general population, but have become matters of great concern in many correctional facilities. In a 1991 survey, 2.3% of State prison inmates were tested positive for HIV, while in Federal prisons 1.0% of the inmates reported having HIV. In both the State and Federal prisons, 9.6% of the HIV-positive inmates showed symptoms of AIDS. Furthermore, it has been found that HIV seroprevalence in correctional settings

exceeds prevalence rates in the general population by as much as 6 to 1 (Martin, Zimmerman, & Long, 1993).

AIDS was first reported in prison inmates in 1983. HIV infection has been a major public health concern in prisons since 1985. A variety of factors contribute to the increased risk of contracting HIV among inmates. Prison populations contain large numbers of individuals who engage in male homosexual activity and intravenous drug use, before, during, and after incarceration (Monnig & Johnson, 1991).

While the number of AIDS cases due to homosexual activity is currently declining among the general population, there has been growing "concern recently about possible relapses in high-risk sexual practices among gay men" (Hammett, Widon, Epstein, Gross, Sifre, & Enos, 1995). Although, it is estimated that this "second wave" of HIV cases may not influence infection patterns for another ten years, it is evident that much more research needs to be conducted to isolate the motivational factors behind such fluctuations. As of now there is relatively little information indicating the reason for such a trend. However, if this prediction is true, the incidence of AIDS cases will not only rise in the general population, but in the prison system as well.

Finding out the exact numbers of individuals within a prison system who are homosexual or have engaged in homosexual activities is often an extremely difficult task. First, any type of sexual activity is forbidden within the prison system

(Hammett, et al, 1995). Admitting that one has taken part in such a behavior would provoke immediate disciplinary action. Consequently, inmates are unlikely to be highly disclosive. Second, there is a certain amount of risk associated with revealing one's homosexuality. Fears of discrimination, segregation, and physical abuse cause many prison inmates who are homosexual to keep their identities hidden.

Finally, some inmates who secretly engage in homosexual acts are not primarily homosexual, or at least, do not consider themselves homosexual. These individuals, especially those in same sex institutions, have justified their prison-specific behavior by explaining that humans are sexual beings and their need to have sexual contact is strong (Hammett, et al, 1995). This provides one mechanism whereby HIV infection can be spread throughout a heterosexual population despite its initial conception in the homosexual community. If a male inmate, who contracted the virus through homosexual practices while incarcerated, engages in unprotected sex with a woman upon his release, the woman may become infected herself. If this woman has unprotected sexual relations with other men, the virus could, unknowingly, be spread throughout a predominantly heterosexual community in a relatively short period of time.

Another common risky behavior among incarcerated males and females is injection drug use. Intravenous drug use is a risk factor in approximately 27-28% of all AIDS cases (Monnig & Johnson, 1991). As much as 70% of the incarcerated population

has a history of IV use (Valdiserri, Hartl, & Chambliss, 1988), and it was estimated that the percentage of drug offenders incarcerated in the federal prisons would increase from the estimated 47% in 1993 to 70% in 1995 (National Commission on AIDS, 1991). In one study, it was estimated that a sample of between 100 and 500 members of the general population would be needed to find one person with a history or repeated IV drug use. In a prison setting, however, it was suggested that a sample of only 100 prisoners would include 30 individuals with a history of repeated IV drug use (Vlahov & Polk, 1989).

In a survey done by Martin, et al, (1993), it was found that as the number of incarcerated individuals rises, "particularly as the count grows of those with drug histories as a result of drug control initiatives," the population of HIV-infected inmates as well as inmates with AIDS will also greatly increase. Dramatic increases such as these will pose great problems down the road. For instance, there is the concern of releasing these increasing number of infected individuals back into the community (Vlahov, 1990). However, most obvious is the concern of producing more HIV-related illnesses and deaths in correctional settings. This could also contribute to rising governmental health care costs.

The lifetime cost per AIDS patient has been on the rise because of earlier detection and more effective measures to slow viral replication. Lifetime treatment costs now exceed $150,000 on average nationally (Dromboski, 1993). The number of inmates requiring both medical care and psychosocial services for the HIV

disease poses great challenges for correctional systems, while the pressure on budgets has heightened. As a result, many correctional facilities are turning to contracted health care services and managed care. In return, there have been several complaints that inmates with HIV and AIDS are being mistreated and underserved, because of what they consider inadequate treatment and improper care. On the other hand, others argue that the inmates are receiving better care inside the prison than they ever got in the outside community. Either way, several conflicts and concerns exist regarding HIV-related prisoner health care.

Correctional facilities provide a unique opportunity to confine the spread of HIV. The implementation of a variety of education programs in correctional settings may help reduce the spread of HIV among prisoners. Inmates are literally a "captive audience" (Epstein, Hammett, & Harold, 1994). They are more available for reduction and intervention programs than individuals in the outside community. Since prisons house a large number of high-risk individuals, it appears to be the absolute best place to start with education and prevention programs. Even more, as most inmates return to the outside community, prison HIV education programs will not only benefit prisoners, but the public as well (Hammett, 1989).

As cited in Martin, et al, (1993), many believe that our best hope for "stemming the spread of HIV disease is prevention, and the best strategy clearly is education." In addition to

providing greater knowledge of HIV transmission, prison-based AIDS education programs also contribute other benefits. For instance, such programs can reduce the fears relating to transmission, teach tolerance of those with the virus, and build support for infected individuals (Martin, et al, 1993). Education programs can also improve working and living environments for both the inmates and staff, while helping to reduce managerial and administrative problems associated with HIV in correctional facilities.

Inmates infected with HIV are considered to be "dually bound." This is because they are bound not only by incarceration, but also by the predicament of carrying HIV. The National Institute of Justice (NIJ) examined the joint stresses of HIV and incarceration. Inmates were stressed over their lack of control of treatment, fear of not receiving emergency care, and fear of watching close friends die in close proximity (Dromboski, 1993). The inmates were also found to be afraid of the rejection by significant others, including their children, other family members, and friends. Lastly, they feared the idea of dying in isolation, without privacy, support of loved ones, personal resolution, or dignity. As one HIV-positive prisoner in Virginia wrote, "There isn't a groundswell of sympathy for individuals with this additional burden" (Vazquez, 1996).

The stigma and ostracism by inmates and staff as well as discrimination by staff and prison policies were also viewed as problems. Discrimination against people with AIDS has been

described as a new form of discrimination referred to as AIDSism. "AIDSism is built on a foundation of homophobia, addictiophobia, and fear of contagion and death" (Cohen & Alfonso, 1994).

Correctional officers have sometimes expressed that they will become infected with HIV as a result of various risks they face on the job. Their anxieties revolve around concerns about bites, being spat upon, having feces thrown at them, or getting it during the course of breaking up fights between inmates. In reality, however, contagion has been highly unlikely as a result of such encounters. Surveys by the NIJ indicate that not a single case of occupational transmission has occurred in prisons in the United States (Blumberg, 1990).

Further, with the numbers of prisoners with AIDS increasing, the question of whether or not to segregate prisoners with AIDS is also an administrative concern. It is believed that such segregation may in fact increase hysteria and reinforce myths surrounding the disease. Segregation in prisons can also lead to serious breaches of confidentiality and infringe the prisoner's rights to privacy. As a matter of fact, it is now generally regarded as favorable to maintain HIV positive people in general prison populations to prevent discrimination and stigmatization of HIV infected inmates (Greenspan, 1988). Education programs will focus on such sensitive issues, in order to try and reduce anxiety and fear by providing knowledge and support.

Lastly, the impact of educational programs within prison settings may greatly affect the broader public health. As

mentioned previously, by reducing the population of infected persons in the prisons or by stopping the spread of AIDS in the 'bridge' group of intravenous drug users, we can reduce the pool of potential HIV transmitters, and therefore reduce transmission of HIV in communities (Martin, et al, 1993).

Education and other efforts to change or reduce high risk behavior are the only way to prevent the spread of HIV in the absence of a cure. HIV and AIDS education programs primarily pursue two goals. First, to provide basic knowledge about high-risk behaviors, and secondly, to teach a variety of different ways in which to reduce the risk of contracting HIV. These goals are important to the general population, but are of particular concern to incarcerated individuals (Monnig & Johnson, 1991). As cited in Epstein, et al, (1994), information and traditional educational sessions alone are not enough to motivate individuals to make and maintain changes in high risk behaviors (Kelly & Murphy, 1992). Individual counseling, support groups, expanded drug treatment opportunities, and peer education programs are other important elements of a comprehensive HIV prevention strategy for correctional facilities (Kelly & Murphy, 1992).

Peer education is a special form of collaborative learning which assumes knowledge represents a consensus about information shared by a community of knowledgeable peers. This can be facilitated by talking together in order to reach an agreement (Bruffee, 1993). Peer education differs from traditional teaching methods that rely on "experts" to convey information to

students, in that students work together in order to communicate information to the group. As the students work together, they learn to trust their peers, which leads to more confidence in trusting the larger community.

Prison populations are hard for experts to reach, because they often mistrust authority. It has been suggested that inmates are the best qualified individuals to educate and communicate to other inmates about HIV and AIDS, because many of them have first-hand knowledge of the risky behavior of their fellow prisoners (Walker, 1993). The mistrust of information provided to the inmates by the administration, has been a recurrent theme in statements from prisoners (Epstein, et al, 1994). Response to the National Prison Project from inmates indicates that they do not trust the information they receive from correctional staff (Greenspan, 1991). A prisoner on work release from Delaware stated that prison peer educators are more effective because they speak the same language. They are more aware of the types of risky behaviors that take place inside the prison. The relationship between the peer educators and the prison population is critical for an optimally effective HIV/AIDS education program (Greenspan, 1991).

Review of Existing Programs

Several state and federal prisons have begun to implement peer education programs. These programs depend upon the assistance of outside consultant organizations. The most widely known peer education and counseling project is ACE (AIDS

Counseling and Education) at the women's prison at Bedford Hills in New York State. This program was started by the women prisoners and functions with the assistance of AIDS educators and activists from the outside, which provide the resources for prisoner educators and counselors (Greenspan, 1992). A group of women in the prison saw a need for AIDS counseling and education. The inmates manage the program which offers support groups, advocacy, counseling, and inmate-to-inmate education. The inmates themselves provide the HIV education and training inside the facility.

Another highly successful peer education project is in the works at the Federal Correctional Institution in Pleasanton, California, and is known as the Pleasanton AIDS counseling and Education (PLACE). The project originally began as a small study group on AIDS and health, and it now provides sessions in the women's housing units (Greenspan, 1992).

The Women's Project of Little Rock, Arkansas began developing a peer-based HIV/AIDS education and support program at the State women's prison at Pine Bluff in 1989. The program was designed to develop prisoner leadership by training inmate peer educators. The Women's Project developed a 19-hour peer trainers' course which was certified by the Centers for Disease Control and Prevention. The course developers were able to learn a lot about the different concerns of their fellow inmates regarding the transmission of HIV. The program encourages group discussion and participation and seating is informal in order to

maintain a closeness and sense of trust. Appropriate language and terms, as well as prison slang are used and the reading materials are appropriate for the reading levels of the inmates (Hammett, 1989).

Another program recently implemented at SCI Waymart in Pennsylvania is also considered to be an effective method of peer education. Don Fiske (1996) described the program as improving the relationship between inmates and staff. He also added that the program had other advantages such as providing additional opportunities for inmate trainers, and bringing people of different cultures and communities together. The program at Waymart has proven to be effective in increasing HIV and AIDS awareness; pretest-posttest comparisons showed a significant increase in inmate knowledge. Fiske, however, stated that some disadvantages of the program, including difficulty in getting staff members to assist in supervising the inmate trainers. (Fiske, 1996).

An example of a typical class design at Waymart includes ten, 2-hour sessions with fifteen minute breaks. All participants are encouraged to complete the course fully, however, this is not mandatory. The presence of staff members is mandatory, and a 100% class attendance is considered desirable. The classes are offered three days a week, with occasional night classes to accommodate those who need them (Fiske, et al, 1996).

In each of the education classes there are two peer educators per group, as well as bilingual individuals for those

classes that need them. When the course is completed, participants provide feedback and fill out a written evaluation sheet. Lastly, the inmates are provided with certificates as a reward for their completion (Fiske, et al, 1996).

Studies have found that these programs increased knowledge about transmission and high risk behaviors. Also, individuals who received formal AIDS education were more likely to adopt "maximal risk" reduction strategies. Those who did not were found to be "partial risk reducers." Altogether, these findings clearly pointed out the importance and value of such educational programs (Baxter, 1991).

Appropriate program evaluation methods are integral to the development of effective responsive peer education programs. Since information about HIV and AIDS is increasing rapidly, mechanisms for updating program content must be built into educational criteria. Program Evaluation recommends the following to improve the program evaluation process: 1) Increase the number of independent evaluations in order to increase the amount of base-line data, 2) Provide encouragement and guidance and begin to capture adequate resources to help correctional systems develop and implement comprehensive evaluation efforts, 3) Begin reviewing related areas of literature, particularly the attitude change on literature, literature on adopting precautions against personal hazards, and the health education literature, and 4) Take stock of what is currently being done in U.S. prisons and the ways of AIDS education for inmates and staff

(Hammett, 1989).

Summary

HIV education programs are essential for this almost forgotten population. Inmates need to become aware of their risky behaviors. They need to be informed of the possible ways of becoming infected, as well as treatments and ways to deal with the disease after diagnosis. Peer education programs will provide this knowledge to inmates while at the same time fostering closer relationships with fellow inmates. Peer educators and fellow group members in turn act as a support system for those in need as well as those who have no one else to turn to.

It may be discovered that the education programs should be specialized for specific groups of inmates. For instance, drug offenders will obviously include numerous injection drug users, therefore perhaps this group's education should concentrate more on risks associated with transmission of HIV through sharing needles. Some of these individuals may have varying levels of cognitive dysfunction as a result of substance abuse, which will compromise their learning capacity. In addition, their history of engaging in life threatening substance abuse practices might be associated with less responsivity to health risk information. In order to assess these possibilities, the nature of inmates' offenses will be included in the current investigation. Responses of drug offenders and non-drug offenders will be considered separately.

Focus Group Methods

In order for any education program to be started, the actual needs of an institution must first be specified. One way of determining these needs is to talk systematically with the individuals who comprise that institution. The focus group technique surveys naturally occurring groups of individuals within an organization in order to obtain a comprehensive picture of the attitude within an institution.

A focus group interview is a qualitative research technique used to obtain data about feelings and opinions of small groups of participants about a given problem, experience, service or other phenomenon (Basch, 1987). These groups have also been used to contribute to the development of quantitative research measures such as surveys and questionnaires. Usually, clusters of people who share the same interests can be interviewed as one group. Institutions generally contain several groups, each of which shares an interest that separates it from the others. When the individuals have been assigned to a particular group, each group can then be interviewed separately; researchers may pose the same questions to each group.

Researchers have found that people will share more of their personal experiences within a focus group than they will within an individual interview (Basch, 1987). It is believed that having the support and security of a group of peers who share similar attitudes makes it easier to voice a personal opinion. When an individual is surrounded by friends, he or she tends to

feel less apprehensive about sharing intimate perspectives, even if aggressive judgements are being expressed (Basch, 1987).

There are many characteristics which make focus group interviews more advantageous than other forms of research techniques. First, the interviewing environment is a unique and vital component that makes a focus group effective. Focus groups usually include between 8-10 people, gathered together in a familiar surrounding. The setting should provide a non-threatening and supportive environment, in which all feel free to share their views (Morgan & Krueger, 1993). This creates a vastly different atmosphere than is present at individual interviews.

Also, the setting should be comfortable and intimate for the participants. The structure of the room should be set up to facilitate interaction between the members of the group. For example, chairs may be placed in a circle, so that all participants have the ability to view each other while they are speaking (Kahn & Cannell, 1957). The area should be free of noise disturbances such as ringing telephones and busy corridors filled with people.

While the researcher poses the questions and notes non-verbal behaviors, the actual discussion is recorded by audio cassette, a fact which is explained to the group before the interview begins. Since the average focus group requires one and a half to three hours to complete, it is important for the moderator to record the discussion and then play it back to

analyze the data. Most investigators prepare a full transcript from the tapes, which can take up to five hours for every hour of discussion (Kahn & Cannell, 1957).

When analyzing the data, the investigators search for specific types of material. They generate a list of key words, ideas, and phrases, and then separate these items into categories and examine the contents, searching for subtopics and themes. These subtopics and themes provide the investigator with the information to form future research projects and education programs. Zemke and Kraminger (1985) suggested that investigators who were writing up the results of their findings include extensive use of direct quotes, in order to facilitate future research endeavors.

Focus group methods have only recently been adopted by health care scientists despite their long history of use in the commercial and political arena. Focus groups have recently been used by health education services to collect data about sensitive topics such as HIV and AIDS issues, homosexuality, rape, etc. (Basch, 1987). Health care officials have found that group interviews provide more truthful information than self-reports, which they discovered are usually laden with lies.

Current Investigation

Given the increasing number of prison inmates becoming infected with HIV, it was decided that focus groups should be offered within prison settings to assess the inmates' knowledge regarding HIV and AIDS issues. It was decided that the inmates

themselves would be asked what types of educational programs they felt were needed to combat the problem.

Based on recent HIV and AIDS incidence figures, it was hypothesized that (1) whites would be more knowledgeable about HIV and AIDS issues related to injection drug use and heterosexual practices, (2) blacks would exhibit a stronger understanding of the dangers of unprotected sexual practices, and (3) hispanics would be most familiar with injection drug use and homosexual issues. Furthermore, it was expected that drug offenders, regardless of race, would be less receptive to educational treatment and would engage in riskier behavior than non-drug offenders.

Methods

Participants:

The sample for this study (N=51) consisted of inmates at a state correctional facility located in the northeastern United States.

Apparatus:

A five question oral survey was designed to measure inmates' knowledge, beliefs, attitudes, behaviors, and experiences regarding HIV-related issues. Responses were recorded using a audio cassette player and microphone, and subsequently transcription.

Procedure:

Volunteers were recruited for focus groups to fulfill the requirements of a 3 x 2 factorial design (racial group x nature of offense). After dividing the participants into various groups, 90 minute focus groups were conducted to determine what the inmates' current understanding of the HIV and AIDS issues were, as well as to establish a common ground for a future HIV education program. Data from each group was analyzed from taped recordings of each interview. Group responses to each question were transcribed and then categorized according to recurring themes. When the data analysis was completed, the group themes for each question were compared with responses from the separate ethnic groups and offense groups. From this analysis, the moderators developed a summary of the inmates' current knowledge

concerning HIV and AIDS issues. This analysis will assist state officials in developing a more comprehensive educational program that better meets the needs of the inmates.

Results

There was 100 percent agreement among the inmates that additional HIV education was needed within their correctional institution. This unanimity was consistent with the high level of concern about HIV transmission they expressed. Some went into detail explaining prisoners' general ignorance about HIV and AIDS related issues. Inmates were particularly interested in educational programs so they could adopt safer practices, to protect themselves from becoming infected, while others expressed concern about protecting their families. These individuals talked about how educational programs in the prison could teach them the facts, and then they could more accurately inform their children about the dangers. Overall, the inmates displayed a pervasive uncertainty about the disease and therefore wanted to learn more about it.

Despite their expressed lack of knowledge, analysis of inmates' responses showed that a majority of the them understood some of the basic mechanisms of HIV transmission. Moreover, the results indicated no significant difference in general HIV knowledge among racial or nature of offense groups. All groups appeared to be equally informed about the risks of transmission of the virus through homosexual and injection drug use behavior. Also, nearly all were aware that the virus could be transmitted from unprotected sex through both homosexual and heterosexual practices. Some inmates even warned that condoms were not 100% effective in preventing the spread of HIV.

It should be noted that a greater sense of uncertainty and irrational fear existed among participants who had no previous formal education about HIV related issues. Others, including a few Hispanic individuals, stated that they did feel more confident about their knowledge because of a former educational program for Spanish-speaking persons that had been provided in the institution.

While the inmates had a firm grasp of some of the possible modes of HIV transmission, beliefs bordering on paranoia were clearly present. Some felt that using the same toilet, washing in the same sink, or taking a shower next to a person who has AIDS were viable means of contracting the disease. Further, some expressed concern that drinking out of the same cup or having any blood contact, no matter how insignificant, were additional ways of developing AIDS. A few individuals said they knew these beliefs were irrational, but reported that they still strongly wanted to avoid those situations. Most of the people who had these beliefs were concerned that "science had not discovered all the possible methods of transmission yet."

Despite certain irrational thoughts, participants' knowledge of transmission through injection drugs appeared to be quit extensive. Most spoke at length about the dangers of sharing needles. Some offered suggestions to always clean the needles (with bleach) before each use, however, only a few pointed out that this procedure is only effective at eliminating the HIV virus if all the blood is washed away. The extent and quality of

the detailed responses and general knowledge responses concerning possible modes of transmission seemed to depend heavily upon whether or not the individual was formerly a drug user. For instance, only those with a history of drug use discussed the dangers of cotton sucking or explained how blood can be unknowingly left in certain parts of the needle apparatus. The majority of the inmates displayed a general consensus that drug users should keep a personal set of needles for their private use only. Many agreed that this was the most effective way for a drug user to reduce his risk of contracting HIV. A few also noted that needle exchanging was an effective process to use with drug addicts and should be carried out in institutions, as well as on the streets, in order to ensure the safety of clean needles.

Avoidance of Precautionary Measures

Analysis of the data further indicated that many inmates experienced a temptation to avoid precautionary measures when it came to drug use. Inmates agreed that if they were shooting up with friends, or if they were already high, they "would not take the ten minutes to clean their works (needles) with bleach" before their next fix. Inmates suggested that addicts should keep a personal supply of needles, or resort to snorting their drugs, to reduce the chance of contracting the HIV virus.

Fear of HIV

Responses revealed that HIV infection is one of the most feared diseases in the prison. In response to one of the

questions during the interview, approximately 80% of the inmates admitted that HIV infection was in fact the disease most frightening to them. Most of the inmates stated that the reason was that there was no cure for AIDS. Other individuals reported fear because of the great pain and suffering AIDS causes. Many mentioned the devastating effects it has on the body, as it causes deterioration "until it wears people away to nothing." These individuals also mentioned that they did not want the people around them, particularly their families, to see them in such poor condition, because it would cause great pain for their loved ones.

Another common theme was fear tied to the fact that the virus could infect anyone; all people, of various ethnic groups, religious sects, and sexual orientations are vulnerable. Several inmates stated that all persons were susceptible to contracting the virus, and that no one knows for certain who may have it. A few inmates even said they mistrusted people's self report, because "some people just don't care about infecting others".

A minority of individuals surveyed did not fear HIV infection the most. These participants felt that other fatal diseases, such as cancer and tuberculosis were, more frightening. They believed that these diseases are not as preventable as HIV and consequently felt they had absolutely no control over whether or not they developed these problems. Most significant, however, was the response of two individuals, who openly disclosed they were HIV positive. These participants clearly stated that they

did not fear HIV the most, mainly because they had it and had yet to experience negative consequences; they were strong and healthy, and they were positive about fighting it.

Community Behavior Attitudes

Another portion of the group interview was designed to elicit discussions about sexual practices of friends outside the prison, and to discover what advice inmates would give to individuals engaging in risky behavior. In responding to these questions approximately 90 percent of the inmates agreed that close acquaintances on the outside do not use condoms when having sex. Most of the remaining 10% stated that even though their friends said they used condoms, most did not trust their friends, stating "behind closed doors, no one knows for sure what actually goes on." A few respondents said they could not answer the question because they have been away from their friends for so long. A few then modified their response to include family members, and agreed that they too were engaging in unprotected sex.

Advising Others to Curb Unsafe Practices

When asked what advice they would give a friend who was taking risks, the responses varied from sitting them down and talking to them, to telling them about their knowledge of HIV and AIDS. Another common theme expressed was to "make sure you talk to them at the right time", because "during an active addiction stage they're not going to listen".

Altogether, the majority of inmates believed that you would

have to do something drastic, such as show them a person dying from AIDS, in order to get most people's attention. A few even argued that if they don't want to listen, then "just give them a gun and go tell them to play Russian Roulette, because that is what they are doing with their lives anyhow."

Concerns About Temptations

Although most were aware of the dangers of practicing unsafe sex and sharing needles, many of these men did not know if they would make the right choices when faced with high risk situations once release from prison. Many confessed that in a moment of passion, putting on a condom would be the furthest thought from their minds. Some were dissatisfied with using condoms because it "takes away from the enjoyment and pleasure of having sex". In addition, others responded that since condoms were not 100% effective in preventing the spread of the virus, there was little reason to use them because "they are only good at reducing one's pleasure."

HIV Education Preferences

In examining the relative merits of different methods for providing HIV education, inmates spoke at length about the value of prison peer education programs. In general, the inmates revealed that they did not trust prison personnel. They felt that the administration was withholding information from them, and was not properly treating individuals within the prison who are currently suffering from the effects of AIDS. Also, many felt that the medical and prison personnel did not know enough

about HIV and AIDS issues. Consequently, formal prison programs that do not include a peer component tend to receive little support.

They had mixed feelings regarding television education programs, which are frequently broadcasted in the prison. One public broadcasting station, The Learning Channel, provides information on a variety of topics, including HIV and AIDS issues. Some inmates found this to be an effective means of increasing their knowledge about AIDS, while others believed it to be too passive a learning technique, and reported that they were not influenced by it.

In addition, several inmates spoke about AIDS information pamphlets that the institution had provided for them in 1994. Some of the inmates believed the pamphlet information to be helpful, however equal numbers admitted to throwing the pamphlets away without ever opening them. They reported that in the prison, if anyone notices you acquiring information about AIDS, rumors will be started suggesting that you have the disease. Once such rumors begin, individuals are usually discriminated against by fellow inmates and prison personnel. As the incidence of AIDS continues to increase, this stereotype is declining, because more and more individuals in the prison are seeking information to protect themselves from contracting the virus.

Group Differences

The expected differences across the drug offender and non-drug offender subgroups were not observed. This may be do in

part to the fact that many of the non-drug offenders also abused substances, although incarcerated for other crimes. All the participants were in treatment for either mental health or substance abuse reasons, and virtually all had received HIV-related prison programming. No apparent sense of invulnerability or excessive denial of death was detected in either the drug offender or non-drug offender group. No differential sensitivity to health risk information was noted.

Considerations of the responses from members of the three racial groups failed to show striking differences. The three groups expressed a common level of concern about HIV, similar knowledge about transmission, and comparable uneasiness about their self and loved one's ability to curtail high risk behavior.

Discussion

Responses revealed an unexpected paradox; in this sample there was evidence of hypersensitivity and hyposensitivity to HIV risk. The participants studied were quite fearful and knowledgeable about HIV and AIDS issues concerning sexual practices and injection drug use. They understood the importance of using condoms and the dangers of sharing needles, however, there were certain modes of transmission of the virus which the inmates did not mention.

All of the discussions were characterized by some glaring omissions. First, tattooing, which is a common practice in prisons, has been determined to be a possible mode of viral transmission (Hammett, et al, 1994). Since clean needles are at a premium, the procedures are often conducted with the use of guitar strings or other needle substitutes. By whatever means the tattooing is completed, the device which is used to inject the ink into the skin can be a source of viral transmission.

Second, no one mentioned non-consenting sexual acts (rape), although this does occur within prisons. In the all male institution in which this research was conducted, an inmate may have felt too frightened or embarrassed to discuss a personal experience of rape within the group setting. In addition, none of the inmates questioned brought up the issues of sharing razor blades. Any blood left on a razor blade from shaving is a possible mode of transmission; no one discussed this risk.

Just because these topics were not discussed does not

necessarily mean the participants were ignorant about these dangers. However, failure of all groups to express the risks associated with these common behaviors is of concern. At times what went undiscussed seemed as revealing as the issues that were talked about. Gaps in this general knowledge suggest that some type of additional HIV education in the institution is required.

From the list of themes generated during the discussions, it appears that the inmates were being truthful in responding. By admitting that temptations would override their ability to take precautions regarding sexual or injection drug use practices, they provided valuable information which can be used to create future education programs. They seemed to be responding honestly in saying they knew the dangers, but did not find them influential enough to change their behavior. If this behavior is common, it must be addressed by HIV education programs.

Participants' responses suggested that a viable means of educating the inmates is peer education. Training inmates and allowing them to teach courses on the subject within the prison may provide a credible, cost-effective approach to improving HIV awareness. Peer education programs have had great success in other institutions within the country, and the consensus from this sample of inmates indicates the results would be the same for this institution. HIV peer education programs offer a variety of benefits not only to inmates, but to the staff as well. Peer education programs may help prompt inmates to seek early diagnosis and treatment. These programs may also help

reduce the fear and stigma of both inmates and staff in dealing with HIV and therefore increase the life span and the overall quality of life for those individuals infected with the illness.

It became evident that many inmates wanted to learn more about HIV and AIDS for the sake of their families. Since many wanted to educate their families and help prevent them from contracting the virus, these concerns may be exploited to motivate others to seek information on the subject. Further, if this perception of responsibility to family can be strengthened, then it may serve as a means of getting individuals to take precautionary measures before engaging in unsafe sexual behaviors.

No significant differences were found among members of the different racial and nature of offense subgroups. There are many reasons why, such as common factors to all inmates, which may have eclipsed the demographic variables in shaping HIV responses. While it might seem rational to assume that high risk group membership might be expected to increase the salience of HIV related information, and therefore increase members' knowledge about HIV, other factors enter into the equation.

First an important point which should be taken into consideration is that high risk group membership may increase the individuals using the defense mechanism of denial (Davidson & Neale, 1994). An individual who is considered to be at a high risk because of intravenous drug use, is usually the type of person who derives health risk information. The individuals have

generally been exposed to information about the dangers of drug use (specifically intravenous injection), but ignore its relevance to them. Admitting the dangerousness of their behaviors increase anxiety. Acknowledging the risk would mean having to change behaviors. Some suggest that increasing inmates' perception that they are at high risk may be counterproductive because many of the inmates believe that any effort to reduce their risk will be futile and consequently escalating anxiety merely increases denial (Longshore, Stein, & Anglin, 1995).

During the state of denial, potentially useful information is simply ignored. As a result, the information is not even considered, let alone processed and retained. It then seems to plausible to assume that high risk group membership, instead of increasing informational salience, might actually cause less awareness and knowledge regarding HIV related issues. Other important issues, such as the common factors shared by the members of all the racial and offense subgroups, should also be taken into consideration. These factors may be more influential than those group variables in determining HIV awareness and knowledge.

All participants in the study, live within the same prison environment. They have shared many common experiences as a result, and if one were to look back at their former living environments, several other common factors emerge. The family backgrounds of the majority of prison inmates may be similar in

many respects, despite the apparent differences in racial and offense subgroups. Many individuals who are incarcerated come from dysfunctional families, which are typically of low status. Often the children are raised in a fairly poor, unstable, and abusive home (Coie, Watt, West, Hawkins, Asarnow, Markman, Ramey, Shure, & Long, 1993). Some may not have enjoyed much adult guidance at all because their parents abandoned them or left them alone most of the time.

Similar family backgrounds may contribute to other commonly shared lifestyle characteristics of prison inmates, most notably substance abuse. Many children from impoverished, dysfunctional families turn to alcohol or drugs at a very young age for a variety or reasons. Some may have been introduced to substance abuse by family members, while others engage in it because it is viewed as an acceptable form of behavior on the streets. Many inmates have at one time or another been involved in some type of substance abuse behavior. What may begin as a means of making quick money, soon turns into a source of dangerous and uncontrollable addiction for many. Consequently, substance use often continues throughout much of their lives. It has been determined that substance abuse, if continued over a long periods of time, may lead to cognitive disabilities (Davidson & Neale, 1994). These cognitive dysfunctions could then affect an addicts learning abilities and indirectly affect what he or she knows about HIV issues.

It is important to note that substance abuse is universal.

It is present in every race and social class. Substance abuse is common among the majority of incarcerated individuals, whether they are a drug offender or not. Despite their offense, most of the inmates are required to go through some kind of substance abuse treatment. As a result, it seems unlikely that the type of offense has a significant impact on the amount of information inmates acquire concerning HIV and AIDS related issues.

Further, prisoners typical have certain personality features in common. For example, impulsivity is a frequent characteristic among all inmates, and it has been found to be independent of racial or offense subgroups (Davidson & Neale, 1994). Impulsive individuals behave spontaneously, frequently acting without prior thought. Such behaviors are often observed in substance abusers. These individuals find it difficult to use the information they learned concerning safe sexual practices and injection drug use when confronted with those situations in the real world. As a result, any knowledge they acquire related to HIV related issues may not be influencial because the warnings of becoming infected are not being understood.

Along with substance abuse and impulsivity exist other shared factors which may contribute to homogeneous attitudes among inmates. It has been found that a large amount of inmates are reincarcerated not long after their release from prison. A University of Maryland researcher, Doris MacKensie, studied many different parole cases and found that as many as 60% of the inmates who are released from prison are arrested within a year

and are returned to their former captivity (Time, 1994). Another studied indicated that youth, a history of substance abuse, and length of prior jail detention were strong predictors of jail reincarceration for 231 persons (ages 17-90 years) (Draine, Solomon, & Meyerson, 1994). Despite stable performance within the prison, when released prisoners typically revert to their usual pre-incarcerated behavior. The national average recidivism rate of criminals is approximately 35% (Time, 1994). Returning to the similar neighborhoods, where is it difficult to turn a new leaf, many find it impossible to keep from returning to their previous behavior. HIV knowledge may be easily forgotten or ignored as many former inmates return to high risk behaviors of unsafe sex and intravenous drug use. After the person is re-incarcerated, an evaluation of what was learned often indicates uncertainty, and the educational process goes back to near baseline.

Educational disadvantages were common to members of the racial and offense subgroups studied. Many inmates suffered from the same types of disadvantages, associated with low socioeconomic status (SES) and poor adult supervision. Some may have been forced to skip school so they could work to support their families. Those who did attend regularly, were faced with the problem of poor funding, unqualified teachers and inefficient equipment, all which may have greatly affected their learning strategies. Learning disabilities are associated with both juvenile delinquency and antisocial personality disorder. The

high rate of learning disabilities found in inmates limits educational effectiveness (Davidson & Neale, 1994). Individuals who had a learning disability to begin with, often did not receive the necessary remedial attention. These educational and learning problems may have limited the effects of HIV education efforts on this inmate population, independent of race or type of offense.

The inmates manifest many common attitudes, beliefs and behaviors which could hinder their knowledge about HIV related issues. For example, suspicion of authority figures is common among inmates. This anti-authority stance may have come from a history of interaction with unreliable, uncaring figures. For the most part the authorities are regarded as enemies. As a result, any information presented by prison personel is often ignored or mistrusted (Martin, et al, 1993). This poses a problem for HIV education programs in prisons because much of what is taught is dismissed. For members of all racial and offense subgroups, the level of HIV awareness and knowledge can be compromised as a result.

Individuals found in prison populations often lack a sense of empowerment, an important quality in the learning process. Empowerment involves a sense of control over one's life (Rappaport, 1985). As a result of being incarcerated, inmates may experience alienation, victim-blaming, learned helplessness, or powerlessness, all which contribute to the absence of empowerment. Most importantly, this lack of empowerment can

cause more serious problems, such as the continual spread of HIV. Recent research has begun to examine how lack of control and disempowerment contribute to underlying susceptibility to disease (Wallerstein & Berstein, 1988). If individuals feel that they cannot make a difference, then the motivation to learn will greatly be affected, and maintaining their own positive health-related behaviors, such as becoming more aware of HIV, is less likely to take place.

Lastly, regardless of race or nature of offense, inmates are hampered by the fear of being stigmatized. Many incarcerated individuals want to become more educated and aware of HIV related issues, however, they are afraid to do so because of the negative label that would be placed upon them inside the prison walls. Many believe if someone knows they are learning, talking, or inquiring about HIV, it will cause them to be the target of discrimination, and segregation (Greenspan, 1988). When it is time to evaluate what is actually known about HIV related issues, among any racial or offense subgroups, some many try to conceal how much they really know about it. Conversely, others may actually knkow nothing at all because they were too afraid to be seen seeking information.

The failure to observe the expected nature of offense differences is probably attributable to the fact that many of those with non-drug related offenses were substance abusers. To be incarcerated under a drug offense, the individual had to be caught dealing or selling drugs. Many of the individuals in the

present study classified as non-drug offenders. They were arrested for committing an offense other than a drug related crime, however, were simultaneously drug addicts. Differentiating between those with substance abuse problems and those without these problems, independent of drug offense, may be valuable in future studies. Problems in obtaining reliable information about substance abuse within the prison made it difficult to make this differentiation in this study.

The findings of this study were largely dependent on the spontaneous generation of ideas by volunteer inmates participating in the focus groups. Replication of the present findings through use of more objective measures would permit more detailed understanding of the exact percentages of inmates characterized in various ways.

Several factors potentially limit the generalizability of the present findings. Since most of these individuals were undergoing inpatient or outpatient programs within the prison for substance abuse or mental health treatment, they may not be representative of all inmates in the institution. These individuals may have been more motivated and concerned about behavioral health care treatment. In addition, most of the inmates in this study also received some basic facts concerning HIV and AIDS issues through information packets, television, or discussion groups sponsored within the prison. This may have resulted in an overestimation of inmates' general understanding of and responsivity to HIV issues. The fact that all

participants were self-selected volunteers also made them atypical. Those who chose to become involved in this study may have had more than the average level of concern about HIV and AIDS.

It should be stated here that the format of the study, including the questions which were asked, were generated exclusively by undergraduate researchers with review and input from SCI-Graterford and Ursinus College Staff. While the experimenters had conducted extensive literature reviews concerning HIV and AIDS issues within prisons and the general population, they have not received any formal HIV/AIDS education or training.

Furthermore, a focus group discussion is often a difficult research procedure to conduct. The moderators must not only ask questions in an objective tone, but must also record any unusual behaviors displayed by participants, allow participants adequate time to respond to the questions, make sure that no one participant dominates the discussion, etc. If focus groups are not conducted properly, biased or inaccurate information may be reported. Consequently, these group discussions are only intended to be used by trained expert facilitators or moderators. It was for this reason that a qualified SCI-Graterford staff person was presented during each group interview held within the prison. The assigned staff person is a licensed Psychologist who is experienced in group research techniques and HIV/AIDS education, and is in currently conducting related research.

Finally, the researchers have not had any prior research experience working with individuals in a prison setting. Since by nature individuals in a prison population are manipulative, responses which were taken to be sincere may not be truly representative of HIV/AIDS issues in the prison or in general population. With this in mind, there exists a real possibility that some of the findings in this study may be biased in favor of prison inmates.

Appendix A

An Assessment Of HIV Issues Among Inmates

At A State Correctional Facility

Race / Nature of Offense	African Americans	Whites	Hispanics	**TOTAL:**
Drug Offenders	4	0	7	11
Non-Drug Offenders	23	11	6	40
TOTAL:	27	11	13	**N = 51**

Appendix B

Another research design will be conducted within the prison based upon quantitative research measures. A 20 to 30 question Likert format survey (quantative measurement) will be designed from the results obtained in the current study, it will then be administered to prison inmates. These findings will be compared with the discoveries from the initial qualitative research study. It is assumed that similar results will be found.

Prison Inmates' Attitudes about HIV and AIDS

1996

Summary of Findings

1. Large Majority Revealed a General Knowledge of HIV Transmission
2. Large Majority Displayed Signs of Paranoia About HIV
3. Majority Knew About Risk Reduction Steps for Intravenous Drug Users
4. Majority Discussed the Temptation to Avoid Taking Precautionary Measures
5. Majority Fear HIV Infection More Than Other Diseases
6. Majority Wanted to Advise Others to Curb Risky HIV Behaviors
7. Majority Favored Peer HIV Education Methods Within the Prison
8. Majority Expressed a Fear of HIV Stigma
9. Inmates Showed Gaps in Knowledge About Some Common Modes of Transmission
10. No Significant Differences Among Race or Offense Subgroups Were Found

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